JAPANESE HEART JOURNAL

Volume 35, 1994

Jpn. Heart J.

Published Bimonthly by

Japanese Heart Journal Association

Editorial Office:
The Second Department of Internal Medicine,
Faculty of Medicine, University of Tokyo,
Hongo, Bunkyo-ku, Tokyo, Japan

ISSN 0021-4868

CONTENTS

Number 1, January

Evidence for Slow Conduction Areas during Pacing in Patients with Sinus Rhythm, and their Relation to the Site of VT Origin. *Masaomi Chinushi, Yoshifusa Aizawa, Yoriko Kusano, Takashi Washizuka, and Akira Shibata* 1

Importance of Total Leg Muscle Mass for Exercise Intolerance in Chronic Heart Failure. *Kyoko Miyagi, Hidetsugu Asanoi, Shinji Ishizaka, Tomoki Kameyama, Osamu Wada, Hikaru Seto, and Shigetake Sasayama* 15

Reduction of ß-Adrenergic Receptors in Atrial Cell Membranes of Patients Following Mild to Moderate Heart Failure. *Fumitaka Ohsuzu, Shuichi Katsushika, Masahiko Akanuma, Naohiro Hakamada, Hiroaki Hamada, Shin-ichi Maie, Katsuki Muneoka, Masanao Okumori, and Haruo Nakamura* 27

Postprandial Hemodynamic Changes Evaluated by a Doppler Echocardiographic Method. *Michiko Ishimine, Toshihiko Takamoto, Masao Nitta, Fumiaki Marumo, Keiji Murakami, and Nobuyuki Takasu* 35

Partial Anomalous Pulmonary Venous Return. Evaluation of 51 Cases. *FilizŞenocak Şencan Özme, Arman Bilgiç Süheyla Özkutlu, Sema Özer, and Muhsin Saraçlar* 43

Pharmacokinetics of Propranolol Used for Suppressing Tachycardia in Hyperthyroidism. *Haruki Musha, Masahiro Murayama, Fumie Motohashi, Hirofumi Masuda, Hideomi Takada, Fumihiko Miyake, and Jiro Sugai* 51

Effects of Vesnarinone (OPC-8212) on Ca^{2+}-Activated K Channels and Cytosolic Ca^{2+} in Cultured Smooth Muscle Cells from Porcine Coronary Artery. *Ken Saito, Yutaka Nakaya, Yukiko Miyoshi, Tetsuzo Wakatsuki, Masahiro Nomura, and Masayuki Shono* 61

Stroke Volume with Dynamic Cardiomyoplasty during Ventricular Fibrillation in the Acute Dog. *Leslie Alexander Geddes, Wolfgang Janas, James Cook, Marvin Hinds, and Stephen Francis Badylak* 73

A Case of Myocardial Infarction Showing Extensive Precordial ST Elevation Induced by Second Diagonal Branch Occlusion. *Hiroshi Sohara, Kenkichi Miyahara, Hideaki Kakura, Hiroshi Miyanohara, Tadashi Kukihara, Jun-ichi Sanada, and Terukatsu Arima* 81

Thrombotic Obstruction of the Right Coronary Artery in a Postoperative Patient with Bland-White-Garland Syndrome. *Junichi Ejima, Mika Fujimoto, Toru Maruyama, Yoshikazu Kaji, Yasuo Tsuda, Takeshi Ohtsuka, Shozo Kanaya, Takehiko Fujino, and Yoshiyuki Niho* 87

An Autopsy Case of Hypertrophic Cardiomyopathy with Pathological Findings Suggesting Chronic Myocarditis. *Hiroaki Kawano, Sachio Kawai, Takashi Nishijo, Toshikazu Shirai, Yoshiaki Inagaki, and Ryozo Okada* 95

Infected Right Atrial Thrombus and Pulmonary Emboli Associated with a Perforated Jejunal Diverticulitis. *Takashi Touma, Shunichi Kaseda, Nobuyuki Kawazoe, Koshiro Fukiyama, Teruo Iwamasa, and Toshiyuki Sueyoshi* 107

Malignant Lymphoma Presenting as a Cardiac Tumor. *Akihiro Terasawa, Satoru Sugihara, Ken-ichi Itoh, and Tatsuaki Matsubara* 111

Cardiac Pheochromocytoma. A Case Report and Review of the Literature. *Tomoko Gomi, Toshio Ikeda, Jun Sakurai, Yoshiyuki Toya, and Maho Tani* 117

Number 2, March

Days Required for 75% Suppression of Ventricular Premature Contractions by Antiarrhythmic Agents Obtained from Continuous In-hospital ECG Monitoring. *Tsuneo Fujito, Kan Takayanagi, Minoru Shimizu, Teruo Inoue, Terumi Hayashi, Yoshihiko Sakai, Shigenori Morooka, and Yutaka Takabatake* 125

Clinical Value of Electrophysiologic Study in Patients with Nonsustained Ventricular Tachycardia. *Masashi Takahashi, Michio Kimura, Isao Kobayashi, Yoshifusa Aizawa, and Akira Shibata* 141

Torsades de Pointes in Paced Patients with Sick Sinus Syndrome after Disopyramide Administration. *Yukiko Kimura, Kan Takayanagi, Yoshihiko Sakai, Tsutomu Satoh, Tsuneo Fujito, Teruo Inoue, Terumi Hayashi, Shigenori Morooka, and Yutaka Takabatake* 153

Assessement of Left Ventricular Filling Dynamics Utilizing Doppler Echocardiography in Acute Coronary Syndrome. *Hiroshi Nonogi, Yoshio Kawase, Shunichi Miyazaki, Kazuo Haze, and Katsuhiko Hiramori* 163

Microwave Ablation of the Atrioventricular Junction *In Vivo* and Ventricular Myocardium *In Vitro* and *In Vivo*. Effects of Varying Power and Duration on Lesion Volume. *Xinchun Yang, Ichiro Watanabe, Toshiaki Kojima, Yoshikazu Takahashi, Akihiro Kanada, Satoshi Kunimoto, Yuji Kasamaki, Kazuhiko Kondo, Satoshi Saito, and Yukio Ozawa* 175

Estimation of Total Carbon Dioxide Contents in Canine Coronary Arterial and Venous Whole Blood Samples. *Kazunari Ishioka, Miyako Takaki, Takuji Akashi, Taketoshi Namba, Hiromi Matsubara, and Hiroyuki Suga* 193

Effects of Swim Training on Blood Pressure, Catecholamines and Prostaglandins in Spontaneously Hypertensive Rats. *Toshio Ikeda, Tomoko Gomi, and Yuzo Sasaki* ... 205

Effect of Serum Concentration on Hypothermic Preservation of Cardiac Myocytes Isolated from Neonatal Rat Ventricle. *Hiroyuki Orita, Manabu Fukasawa, Shigeki Hirooka, Hideaki Uchino, Kana Fukui, Minoru Kohi, Masahiko Washio, and Takahiko Suzuki* 213

Evaluation of Immature Cardiac Myocyte Viability after 24 Hours of Hypothermic Preservation. *Hiroyuki Orita, Manabu Fukasawa, Kiyoshige Inui, Shigeki Hirooka, Hideaki Uchino, Kana Fukui, Minoru Kohi, and Masahiko Washio* 225

A Case of Spontaneous Coronary Artery Dissection Associated with Acute Myocardial Infarction and Stroke. *Kazunori Saeki, Takao Endo, Yoshifumi Tomita, and Hirokazu Hayakawa* 237

Atrioventricular (AV) Nodal Reentry Associated with 2:1 Infra-His Conduction Block during Tachycardia in a Patient with AV Nodal Triple Pathways. *Haruhiko Abe, Takashi Ohkita, Masasuke Fujita, Yasuhide Nakashima, and Akio Kuroiwa* 241

Catheter Ablation of Atrioventricular Accessory Pathway with Decremental Properties Connecting to the Tricuspid Annulus. *Yasuteru Yamauchi, Akihiko Nogami, Masahiko Goya, Kazutaka Aonuma, Yoshito Iesaka, and Michiaki Hiroe* 249

Mesothelioma in the Atrioventricular Node. Case Report. *Hiroaki Kawano, Ryozo Okada, Yasuko Kawano, Takashi Tokano, Masataka Sumiyoshi, Yuji Nakazato, Yasuro*

Nakata, Hiroshi Yamaguchi, and Toshikazu Shirai 255

Number 3, May

Paul Dudley White International Lecture: Cardiac Performance as Viewed Through the Pressure-Volume Window. *Hiroyuki Suga* 263

Correlation of Diagnostic Accuracy of Dipyridamole Thallium-201 Myocardial Scintigraphy and Clinical Findings during Stress. *Masafumi Nakayama, Munehiko Tanno, Hideo Yamada, Shin-ichiro Ohkawa, and Saburo Mashima* 281

Left Ventricular Structure and Function by Echocardiography in Childhood Swimmers. *Sema Özer, Ergün Çil, Gül Baltaci, Nevin Ergun, and Sencan Özme* 295

Effect of Digoxin on Exercise Performance in Mildly Symptomatic Patients with Idiopathic Dilated Cardiomyopathy and Sinus Rhythm. *Yasuhiko Tanabe, Minoru Takahashi, Takeshi Momotsu, Hirohiko Kuwano, Makoto Kodama, Takashi Tsuda, Tohru Izumi, and Akira Shibata* 301

Type IV Collagen in Hypertrophic Cardiomyopathy. *Kazuo Ohsato, Masami Shimizu, Norihiko Sugihara, Hidekazu Ino, Hiroyuki Yoshio, Yoshinori Takagi, and Ryoyu Takeda* 311

A Quantitative Estimation of Electric Current Due to Myocardial Injury. *Akira Nozaki, Iku Toda, Saburo Mashima, and Tsuneaki Sugimoto* 323

Comparative Mechanical Study of Isolated Papillary Muscle from Wistar-Kyoto and Wistar Rats. *Marina Politi Okoshi, Carlos Roberto Padovani, Sílvio Cesar Nardi, and Antonio Carlos Cicogna* 333

Time Course of Changes in Phospholipid in Cardiac Mitochondria from Rats Recovering from Prolonged Swimming. *Waree Keatisuwan, Masataka Kinjo, and Tomiyasu Koyama* 345

Benefits and Demerits of Antihypertensive Therapy by High-Dose Calcium Channel Blocker in Severely Hypertensive Rats. *Yoshiichi Ogawa, Toshihiko Ishimitsu, Hiroki Tsukada, and Shigeru Yagi* 353

Effect of N^G-Monomethyl-L-Arginine on Regional Vascular Resistance in Rats. *Tetsuya Nakamura, Tetsuo Sakamaki, Kunio Sato, Zenpei Ono, and Russell L. Prewitt* ... 363

Two Cases of Acute Myocardial Infarction Associated with Aplastic Anemia during Treatment with Anabolic Steroids. *Masahiro Toyama, Shigeyuki Watanabe, Toshitaka Kobayashi, Kaname Iida, Susumu Koseki, Iwao Yamaguchi, and Yasuro Sugishita* 369

A Case of Orthostatic and Postexertional Hypotension with Ischemic Electrocardiographic Changes. *Takashi Ueyama, Takuzo Hano, Ken Kasamatsu, Osamu Mohara, Hiroki Shima, Kenji Ueshima, Kazuya Fukuda, Yuji Ueno, and Ichiro Nishio* 375

Detection of Anomalous Origin of the Left Coronary Artery by Transesophageal Echocardiography and Magnetic Resonance Imaging. *Bunji Kaku, Masami Shimizu, Yoshihito Kita, Hiroyuki Yoshio, Hidekazu Ino, and Ryoyu Takeda* 383

Coronary Artery Ectasia with Annuloaortic Ectasia. *Akira Hoshio, Kinya Shirota, Tetsuya Doi, Yoshihiro Sawada, Masaharu Fukuki, Hiroshi Kotake, Hiroto Mashiba, Takashi Kasahara, and Satoshi Endo* 389

Apical Hypertrophic Cardiomyopathy with Unusual Features in a Greek Woman. *Athanasios Kranidis, Gerasimos Filippatos, Sofia Mavrogeni, Konstantinos Kostopoulos, Kostas Kappos, Fotis Kardaras, Wolfang Fehske, and Lambros Anthopoulos* 395

Number 4, July

Responses to Hemodynamic Stress in the Aged Heart. *Shogen Isoyama, Nobuhiko Ito, Masashi Komatsu, Yuko Nitta, Koji Abe, Masashi Aoki, and Tamotsu Takishima* 403

Clinical and Angiographic Characteristics of Patients with Multivessel Coronary Spasm in Variant Angina. Significance of Progressive Course of Angina and Disease Activity. *Yutaka Igarashi, Yusuke Tamura, Yasuhiko Tanabe, Toshio Fujita, Senji Hayashi, Masaru Yamazoe, and Akira Shibata* 419

Atrial Pacing-Induced Reverse Alternating Wenckebach Periods. A Common Electrophysiologic Phenomenon in Patients with Dual Atrioventricular Nodal Pathways. *Tsu-Juey Wu, Shih-Ann Chen, Chern-En Chiang, Chin-Juey Yang, Chen-Chuan Cheng, Shih-Pu Wang, Benjamin N. Chiang, and Mau-Song Chang* 431

The Effects of Thyroid Hormones on the Heart Following Global Ischemia. A Clinical and Experimental Study. *Volkan Sinci, Halim Soncul, Serdar Gunaydin, Velit Halit, Levent Gokgoz, Oguz Tatlican, Ali Yener, Ayse Bilgehan, and Ali Ersoz* 443

Protective Effects of Verapamil and Adenosine Treatment on High Energy Phosphate Metabolism in Ischemic and Reperfused Myocardium. *Shigeki Yanagida, Fumitaka Ohsuzu, Nobuhiro Sakata, Shinichi Maie, Masahiko Akanuma, Eiichi Takayama, Katsumi Hayashi, Noboru Aosaki, and Haruo Nakamura* 455

Effects of Microsphere Suspension Agents on Systemic Hemodynamics in Rats Comparison of Nonradioactive Colored and Radioactive Microspheres. *Naohiko Kobayashi, Kiminari Kobayashi, Koichi Kono, Tomoyuki Akabane, Hiroshi Kaneko, Masanori Takada, Noriaki Tsuchiya, and Shigeru Yagi* 467

Proceedings of the XXIX Annual Scientific Meeting of the Society for the Spontaneously Hypertensive Rat (SHR), September 30–October 1, 1993, Tokyo 477

Number 5, September

Ventricular Wall Stress Revisited. A Keystone of Cardiology. *Yasuro Sugishita, Keiji Iida, Sadanori Ohtsuka, and Iwao Yamaguchi* 577

Effect of Two Different Therapeutic Approaches on Total and Cardiovascular Mortality in a Cardiovascular Study in the Elderly (CASTEL). *Edoardo Casiglia, Paolo Spolaore, Alberto Mazza, Giuliana Ginocchio, Giovanna Colangeli, Caterina Onesto, Giuseppe Di Menza, Lorenza Pegoraro, and Giovanni B. Ambrosio* 589

Malignant Hypertension in North West India. A Hospital Based Study. *Bal K. Sharma, Gurpreet Singh, and Sushil Sagar* 601

Procainamide-Induced Changes in Reentrant Ventricular Tachycardia with Special Reference to the Tachycardia-Interrupting Critical Paced Cycle Length during Transient Entrainment with Rapid Pacing. *Yoshifusa Aizawa, Naoki Naitoh, Takashi Washizuka, Hitoshi Kitazawa, Kazuyoshi Takahashi, Itsuo Kodama, and Akira Shibata* 611

Atrial Demand Pacing in Patients with Symptomatic Sick Sinus Syndrome. *Wen Lieng Lee, Chi Woon Kong, Jiann Jong Wang, Wan Leong Chen, Shih Pu Wang, and Mau Song Chang* 625

Echocardiographic Findings in Some Metabolic Storage Diseases. *Filiz Şenocak, Muhsin Sarçlar, and Süheyla Özkutlu* 635

Coronary Blood Flow Autoregulation and Flow Heterogeneity in the Stunned

Heart. *Carla B. Shnier, Brian A. Cason, Anne F. Horton, and Robert F. Hickey* 645
Hyperresponsiveness of Cardiac Muscles to Histamine in Reserpine-Treated Guinea Pigs. *Nobuyuki Okazaki, Kouichi Tanonaka, Yoshihisa Nasa, Norio Takagi, Takashi Yamasaki, Shoji Yoshida, and Satoshi Takeo* 661
Ca^{2+} Waves and Intracellular Ca^{2+} Concentration in Guinea Pig and Rat Myocytes. *Hideharu Hayashi, Haruo Miyata, Hajime Terada, Hiroshi Satoh, Hideki Katoh, Takurou Nakamura, and Akira Kobayashi* 673
Intracoronary Acetylcholine-Induced Prolongation of the QT Interval and Torsade des Pointes in Long QT Interval Syndrome. *Yoshifusa Aizawa, Taku Matsubara, Koutarou Higuchi, Takashi Washizuka, Yuhsuke Tamura, Hirohide Uchiyama, Yutaka Igarashi, and Akira Shibata* 683
A Case of Arrhythmogenic Right Ventricular Dysplasia with Atrial Flutter. *Yuji Nakazato, Yasuro Nakata, Takashi Tokano, Yasuhiko Ohno, Teruhiko Hisaoka, Masataka Sumiyoshi, Shunsuke Ogura, Hiroshi Yamaguchi, Sachio Kawai, Ryozo Okada, and Nobutane Hazato* 689
AA-Amyloidosis Presenting with Chronic Diarrhea and Cardiac Manifestations. *Mustafa Demirtaş, Ayda Uluhan, Saime Paydaş, Gülfiliz Gönlüşen, Ayhan Usal, Ilhan Tuncer, and Ahmet Birand* 695

Number 6, November

Why Do I Stand Against the Movement for Cardiac Transplantation in Japan? *Yoshio Watanabe* 701
Improvement of Multiple Coronary Risk Factors in Obese Hypertensives by Reduction of Intra-abdominal Visceral Fat. *Osamu Tochikubo, Eiji Miyajima, Keiichiro Okabe, Kazusada Imai, and Masao Ishii* 715
The Significance of Right Ventricular Ischemia in Reflex Bradycardia in Humans. *Isao Kubota, Sukehiko Kawashima, Tomoyasu Yahagi, Toshikazu Goto, Tamio Miura, Takao Araki, and Koichi Yokoyama* 727
Measurement of Systemic Resistances in Aortic Regurgitation. *Renato Razzolini, Marco Zennaro, Angelo Ramondo, Giambattista Isabella, Paolo Cardaioli, Manuela Martini, Francesco Campisi, and Raffaello Chioin* 733
Apoptosis in Acute and Chronic Myocarditis. *Hiroaki Kawano, Ryozo Okada, Yasuko Kawano, Noriyoshi Sueyoshi, and Toshikazu Shirai* 745
Pericardiocentesis and Drainage by a Silicon Rubber Line without Echocardiographic Guidance. Experience in 55 Consecutive Patients. *Kunshen Liu, Wenling Liu, Xiaotao Li, Yue Xia, Guohua Wan, Sujie Yang, Shuping Ma, Xizheng Huang, Xiaoyong Qi, and Jinquan Liang* 751
Fibrinolytic Activity and Platelet Release Reaction in Essential Hypertension. *Ali Keskin, Murat Tombuloglu, and Filiz Büyükkeçeci* 757
Circadian Variation in the Occurrence of Fatal Pulmonary Embolism. Differences Depending on Sex and Age. *Massimo Gallerani, Roberto Manfredini, Francesco Portaluppi, Raffaella Salmi, Paolo Zamboni, Anna Cocurullo, Luciano Ricci, Livio Bariani, and Carmelo Fersini* 765
Possible Clinical Applications of the External Work Reserve of the Myocardium. *Rachad M. Shoucri* 771
High Resolution Miniature Trans-Esophageal Echocardiography is Useful to Evalu-

ate Atherosclerosis and the Effects of Alacepril in Hyper-Cholesterol Rabbits. *Shigeo Yoshida, and Kasumi Itoh* 789
Coronary Fistulous Communications with Left Ventricular Chamber and Giant Mural Thrombus after Myocardial Infarction. *Sugato Nawa, Hiroyuki Soga, Atsushi Urakami, Yasuo Miyachi, Norihide Toshino, Kenji Hayashi, and Nobuyoshi Shimizu* 801
Percutaneous Balloon Valvuloplasty with a Modified Inoue Balloon for Stenosis of a Porcine Bioprosthesis in the Tricuspid Valve Position. *George Koike, Akira Yamada, Tetsuji Inou, Yoshitoshi Urabe, and Akira Takeshita* 809
Announcement: UEDA Heart Award for 1994 813
Author Index 815
Subject Index 823